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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,533	01/24/2007	Philip Mcillañd	Q94942	8482
23373	7590	11/13/2007		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER AURORA, REENA	
			ART UNIT 2862	PAPER NUMBER
			MAIL DATE 11/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/579,533

Applicant(s)

MEILLAND, PHILIP

Examiner

Reena Aurora

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8 - 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 8 - 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/16/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

Claims 8 – 14 are presented for examination.

This application is in condition for allowance except for the following formal matters:

#### *Drawing*

New corrected drawings are required in this application because the drawings are present in foreign priority application, but not separately for this application.

#### *Claim Objections*

Claim 8 is objected to because of the following informalities: at lines 11 and 12, it is unclear what is meant by the phrase "the flow of which currents on the surface"? Appropriate correction is required.

Claim 9 is objected to because of the following informalities: at line 13, it is unclear what is meant by the phrase "the flow of which currents on the surface"? Appropriate correction is required.

Claim 11 is objected to because of the following informalities: line 1, it is unclear what includes a device for cooling the base? Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

As to claim 8, the prior art fails to show a method for detecting surface defects on a metal product wherein the first and second cells in each row are activated, these cells being separated from each other by at least one inactive measurement cell, the first cell generating eddy currents on the surface of the metal product, the second cell detecting the eddy currents generated by first cell, at predetermined time intervals the two activated cells are inactivated and the control step is repeated with two following cells which are offset by at least one cell along the same row relative to the two inactivated cells and the second cells of each row being configured so as to produce signals of opposed polarity when a defect is detected. These features taken together with the other limitations of the claim renders the claims allowable over prior art.

As to claims 9 – 14, the prior art fails to show a system for detecting surface defects on a metal product comprising first and second cells in each row, which are separated from each other by at least one inactive measurement cell, the first cell being activated so as to generate eddy currents on the surface of said metal product and the second being activated so as to detect the eddy currents generated by the first cell, and the cells of the second row in the same way as the cells of the first row. These features taken together with the other limitations of the claim renders the claims allowable over prior art.

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***Prior Art of Record***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Hardy et al. (6,344,739) is cited for its disclosure of an eddy current testing probe.

Takemoto et al. (5,390,109) is cited for its disclosure of a sensor matrix detecting location of metal body.

Ashe (6,172,499) is cited for its disclosure of an eddy current error-reduced AC magnetic position measuring system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
REENA AURORA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2800

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora